subtropical America, chiefly from the Caribbean region. Two of these species, barbadensis and convexiuscula, have six arms and need not be further considered. From alternata this species differs in the smaller paxillae with stouter spinules and in the occurrence of pedicellariae on the paxillae of the lateral portions of the arms. From variegata and quequenensis it differs in the presence of pedicellariae on the lateral paxillae, and in the fewer and more localized spine-bearing paxillae. In the presence

of numerous pedicellariae on the lateral paxillae, in the character of the paxillae, and in the form of the pedicellariae on the actinal surface it agrees with the west African numidica. It appears to differ from numidica in having the spines on the abactinal surface more numerous, longer, and more slender, the abactinal pedicellariae more regular and more numerous, and the paxillae in the midline of the arms smaller with less diversified spinelets. It is without doubt the American representative of numidica.

ZOOLOGY.—Notes on some recently collected hydroids in the United States National Museum, with descriptions of three new species. C. McLean Fraser, University of British Columbia. (Communicated by Waldo L. Schmitt.)

A small assemblage of hydroids from the United States National Museum, recently collected, is made up of three lots: a collection made off the coast of South Carolina, Georgia, and northern Florida by the *Pelican*, February, 1938, to February, 1940; a collection made from the lower Potomac oyster bars in December, 1942, and January, 1943; and a collection from the Louisiana State University, obtained off the Florida and Louisiana coast in the summers of 1942 and 1943, respectively.

Although only 13 species were obtained, most of them common, the collections were not lacking in interest. Three of the species appear to be new, and the known range of each of three others was extended. Two of the new species were from the *Pelican* collection and the other one from the Louisiana collection. Of the species of which the range was extended, two were from the *Pelican* collection and one from the lower Potomac.

I wish to express my indebtedness to the United States National Museum for again making available to me for study interesting hydroid material, and also to Miss Marian McCrea, of Vancouver, who has made the enlarged drawings used in illustration.

SPECIES FROM THE Pelican COLLECTION

Halecium gracile Verrill. Station 182-16; lat. 32°53′ N., long. 79°30′ W., 5 fathoms. Synthecium tubithecum (Allman). Station 181-

13, lat. 32°03′ N., long. 79°49′30′′ W., 14 fathoms.

¹ Received October 18, 1944.

Monostaechas quadridens (McCrady). Blackfish Bank, S. C., depth not given.

Aglaophenia acacia Allman. Station 181-14, lat. 32°03′30″ N., long. 79°45′30″ W., 16 fathoms; station 183-11, lat. 33°40′ N., long. 78°13′30″ W., 9 fathoms. The only previous records in the western Atlantic for this species are for off North Carolina. These records extend the range southward to Savannah, Ga.

Aglaophenia aperta Nutting. Station 13, lat. 29°20′ N., long. 88°16′ W., 33 fathoms; station 14, lat. 29°20′ N., long. 88°28′ W., 30½ fathoms. There are two previous records of this species, both off Habana, the one in 194 fathoms, the other in 200. These records extend the known range some distance to the northward and into much shallower water.

Aglaophenia longiramosa, n. sp. Station 142-5. lat. 29°58′ N., long. 88°03′ W., 16 fathoms. Cladocarpus longipinna, n. sp. Station 13, lat. 29°20′ N., long. 88°16′ W., 33 fathoms.

SPECIES FROM LOWER POTOMAC OYSTER BARS

Bimeria tunicata Fraser. Station 19, Lower Cedar Point Bar. This record extends the known range of this species very considerably, as all previously recorded specimens were obtained off the coast of Louisiana.

Clytia longicyatha (Allman). Station 1, Sheepshead Bar; 3, Cords Flats Bar; 13, Higgins Point Bar; 15 and 16, Sheepshead Bar; 18, Heron Island Bar. This must be the common species in this area, since it appeared in all the stations but one from which hydroids were collected.

Thuiaria argentea (Linnaeus). Station 13, Higgins Point Bar.

SPECIES FROM LOUISIANA STATE UNIVERSITY (Presumably all littoral)

Bougainvillia inaequalis Fraser. Front Beach, Grand Isle, La.

Eudendrium speciosum, n. sp. Santa Rosa Sound, Pensacola, Fla.

Aglaophenia late-carinata Allman. Grand Isle, La.

Eudendrium speciosum, n. sp. Fig. 1

Trophosome.—Colony erect, 4-5 cm, with a continuous main stem, nearly straight, with several branches varying very much in length: the larger ones are branched again; there is a tendency to alternation, but it is rather irregular. The main stem is practically free of annulation, although somewhere in its length there may be a single series of two or three annulations; none appears above the origin of the branches. Each branch has rather an abrupt bend near the base, and the base appears to be set on the stem rather than to be growing from it. Each branch and pedicel has four or five annulations at the base, but otherwise the surface is smooth; even in the larger branches annulations appear only at the base. The hydranth is handsome, with about 25 long, slender tentacles.

Gonosome.—Male gonophores, bithalamic, are arranged in a single whorl around the base of the hydranth which is not at all aborted. Female gonophores were not observed.

Type.—U.S.N.M. 43464.

Aglaophenia longiramosa, n. sp. Fig. 2

Trophosome.—Colony stout, 15 cm, consists of a main stem and several long branches that grow outward at an acute angle with the stem and pass along in much the same direction as the stem, to look like a portion of the stem itself; both stem and branches are fascicled. The hydrocladia are given off alternately from both stem and branches; they are long, up to 2 cm or even more; they are divided into short internodes, but at times the nodes are not so pronounced as the internal septa, of which there are two to each internode; the one nearly opposite the intrathecal septum is strongly marked; the other, just below the supracalycine

nematophore, is not so distinct; sometimes it scarcely shows. The hydrotheca is about $1\frac{1}{2}$ times as long as wide, projecting outward at an angle of 15°, and with the margin comparably oblique; the face is nearly straight; the intrathecal ridge is well marked, horizontal, and complete, slightly lower than the corresponding internodal septum. There are seven marginal teeth; the median tooth is small and rather sharp, the first lateral is slightly larger and blunter, the other two laterals are broader and rounded at the tip. The supracalycine nematophore is curved, reaching beyond the margin of the hydrotheca; the mesial nematophore is almost as long as the face of the hydrotheca; only a small, somewhat shovel-shaped portion is free.

Gonosome.—Not observed. Type.—U.S.N.M. 43463.

Cladocarpus longipinna, n. sp. Fig. 3

Trophosome.—Fragment of colony, 4 cm, was not branched; stem fascicled; hydrocladia up to 2 cm in length, slender, divided into long internodes that are strongly septate, usually eight or nine septa present. The hydrotheca is long and slender, gradually increasing in size from base to margin; face slightly convex; the intrathecal ridge is short, turned upward; the margin is horizontal. There is one short median tooth much longer than the others, of which there are six pairs, shallow and rounded to produce a wavy appearance. The supracalycine nematophores overtop the margin of the hydrotheca; the mesial nematophore is short, with the base adherent to the internode below the hydrotheca and the short free portion projecting out past the base of the hydrotheca; there is a definite joint at the base.

Gonosome.—The gonangia are oblong, with the tip curved over, and the opening pointing outward or downward; they grow in large numbers from the bases of the hydrocladia and from the stem nearby. The phylactogonia are of the staghorn type with two prongs, each regularly curved, with usually four points to each prong.

Remarks.—This species closely resembles C. septatus Nutting. It differs from it in having a fascicled stem, a longer and slenderer hydrotheca, with a greater number of small teeth on the margin, and in having simpler phylactogonia.

Type.—U.S.N.M. 43465.



Fig. 1.—Eudendrium speciosum, n. sp.: a, natural size; b, portion of colony showing hydrothecae and male gonophores ($\times 20$). Fig. 2.—Aglaophenia longiramosa, n. sp.: a, natural size; b, portion of hydrocladium with hydrothecae ($\times 20$); c, portion of hydrocladium with hydrothecae ($\times 40$). Fig. 3.—Cladocarpus longipinna, n. sp.: a, natural size; b, portion of colony showing hydrothecae, gonangia, and phylactogonia ($\times 20$); c, portion of hydrocladium with hydrothecae ($\times 20$); d, two hydrothecae ($\times 40$).